

REMARKS

Reconsideration and allowance in view of the foregoing amendments and the following remarks are respectfully requested.

Claim 1 has been amended. Claims 1-11 are pending in this application.

Claims 1, 4, 5 stand rejected under 35 U.S.C. §102(b) as being anticipated by Liu et al. Applicant traverses the rejection for the following reasons.

The claimed invention now recites a step of removing a patterned insulating film from a metal line layer by an isotropic etching process so that the metal polymer is removed together with the patterned insulating film, thereby exposing a top surface of the metal line layer, as recited in claim 1, as amended. Applicant submits that Liu et al. at least fails to disclose or suggest this step.

As submitted in the previous response, Liu et al. discloses a cap layer 28 that is etched (columns 8 and 9). However, Liu et al. does not disclose a metal polymer as recited in claim 1. In addition, Liu et al. fails to teach or suggest the step of removing the cap layer 28 as recited in claim 1. As shown in Figures 2-8, the cap layer 28-78 remains on top of the protective layer 26. Because of this, the Liu et al. method would not be effective in the removal of metal polymer along with the insulating film, as recited in claim 1.

Furthermore, Liu et al. is moot in describing or teaching the feature of exposing a top surface of the metal line layer. As clearly shown in the Figures of Liu et al., the cap layer 28-78 remains on the wiring line layer 24 after the etching process. As a result, the top surface of the wiring line layer 24 is not exposed.

Therefore, Applicant respectfully submits that claim 1 and its dependent claims 4 and 5 are not anticipated by Liu et al. under 35 U.S.C. §102(b).

Claims 2, 3, 6, 7, 11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Liu et al. as applied to claim 1 above, and further in view of Gutsche et al. Claim 8 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Liu et al. and Gutsche


et al. as applied to claim 6 above, and further in view of Fujiwara et al. Claim 9 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Liu et al., Gutsche et al., and Fujiwara et al. as applied to claim 6 above, and further in view of Keil et al. Claim 10 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Liu et al. as applied to claim 1 above, and further in view of Lin et al. Applicant traverses these rejections for the following reasons.

As set forth above, Liu et al. neither discloses nor suggests all of the features of the claimed invention. Applicant submits that Gutsche et al., Fujiwara et al., Keil et al. and Lin et al., either alone or in combination, do not supply the above-noted deficiencies of Liu et al. Therefore, claims 2, 3, 6 and 7-11, which are dependent on claim 1, are patentable for the reasons discussed above with respect to claim 1, as well as on their own merits.

All objections and rejections having been addressed, it is respectfully submitted that claims 1-11 are now in condition for allowance and a notice to that effect is earnestly solicited. If any issues remain to be resolved, the Examiner is cordially invited to telephone the undersigned attorney at the number listed below.

Respectfully submitted,

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